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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,274	07/13/2001	Clifford Theodore Papsdorf	8609	2737
27752	7590	02/06/2006	EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			TAWFIK, SAMEH	
			ART UNIT	PAPER NUMBER
			3721	
DATE MAILED: 02/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	09/905,274	PAPSDORF, CLIFFORD THEODORE	
	Examiner	Art Unit	
	Sameh H. Tawfik	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2-6, 13-18, 21-23, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Tipper (U.S. Patent No. 3,348,458).

Tipper discloses method and apparatus for forming pleatable web having a mutually orthogonal machine direction, a cross machine direction and a Z-direction, see for example (Fig. 4) the apparatus comprising a first series of elongate spaced protuberances converging in the cross machine direction (Figs. 2 and 4; via 36); a second series of elongate spaced protuberances converging in the machine direction (Figs. 2 and 4; via 37), wherein the first series of protuberances and the second series of protuberances interleave in the Z-direction (Figs. 2-4, 19, and 22); and the first series and the second series of interleaved protuberances being capable of folding a pleatable web into a generally pleated pattern of machine direction pleats upon contact of the web relative to the first and second series of protuberances (Figs. 16-19 and 22).

Regarding claim 2: the apparatus has a machine direction inlet to the first and second series of elongate spaced protuberances and the apparatus has a machine direction outlet from the first and second series of elongate spaced protuberances wherein the web maintains contact with the first series and the second series of interleaved protuberances from the inlet to the outlet, see for example (Figs. 1 and 3).

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Regarding claim 3: wherein the converging elongate spaced protuberances are blades (Figs. 4; via 36 and 37 and Figs. 16-19; via 109 and 108).

Regarding claims 4 and 16: a converging tunnel (Fig. 1, via pleated casing 48) disposed downstream in the machine direction of the first and second series of interleaved protuberances (36 and 37) to receive the web and wherein the pleated web is constrained by the converging tunnel to maintain the pleated pattern when the web is within the converging tunnel (Fig. 1).

Regarding claims 5 and 15: the converging tunnel comprises an arcuate cavity for receiving the web (Fig. 1; via 48); note that it is inherent pleated casing 48 discloses cavity for receiving the web.

Regarding claims 6, 18, and 22: a drive roll for pushing the pleatable web into the interleaved protuberances, see for example (Fig. 1); note that it is inherent the machine has some drive means to convey the web.

Regarding claim 13: the first series of protuberances and the second series of protuberances are spaced apart in the cross machine direction (Fig. 4).

Regarding claim 18: pushing the pleatable web relative to the interleaved first and second series of converging elongate spaced protuberances (Figs. 16-19; via by pushing the protuberances toward each other).

Regarding claim 23: the pleatable web has a first side and a second side opposed thereto, the first series of spaced protuberances contacting the first side and the second series of spaced protuberances contacting the second side when the pleatable web contacts the web pleating apparatus (Figs. 16-19).

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Regarding claim 26: wherein the arcuate cavity has a radius being decreasable in the machine direction, see for example (Fig. 1).

Regarding claim 27: wherein the arcuate cavity has a substantially uniform radius, see for example (Figs. 1 and 16-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipper (U.S. Patent No. 3,348,458).

Tipper does not specifically disclose that the second coefficient of friction of the drive roller is greater than the first coefficient of friction of the protuberances. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper's web pleating apparatus by having the second coefficient of friction of the drive roll is greater than the first coefficient of friction of the first and second spaced protuberances, as a matter of engineering design choice, since the examiner takes an official notice that it has to be differences between frictions in order to keep transferring and driving the web through the apparatus is old, well known, and available in the art.

Regarding claims 8 and 19: Tipper does not disclose a heater for heating the pleated web. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper's web pleating apparatus by having a heater for

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heating the pleated web, as a matter of engineering design choice, since the examiner takes an official notice that using heater for heating the pleated web is old, well known, and available in the art.

Regarding claim 9: Tipper does not disclose a cooler for cooling the web downstream from the heater. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper's web pleating apparatus by having a cooler for cooling the web downstream from the heater, as a matter of engineering design choice, since the examiner takes an official notice that using cooler for cooling the web downstream from the heater is old, well known, and available in the art.

Claims 10-12, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipper (U.S. Patent No. 3,348,458) in view of Benedict (2,314,757).

Tipper does not disclose that a scoring device prior to the pleatable station wherein the scoring device comprises first and second axially rotatable rolls and maintaining a fixed gap therebetween. However, Benedict discloses a similar web pleating apparatus comprising a scoring device comprises a first and second axially rotatable rolls (Fig. 1, via rollers 15 and 16) and maintaining a fixed gap there-between (Fig. 1, note it has to be gap between rollers in order to feed the web there-between).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper's web pleating apparatus by having a scoring device comprising a first and second axially rotatable rolls and maintaining a fixed gap therebetween, as suggested by Benedict, in order to reduce friction and danger of breakage of the web (column 1, lines 11-13).

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Conclusion

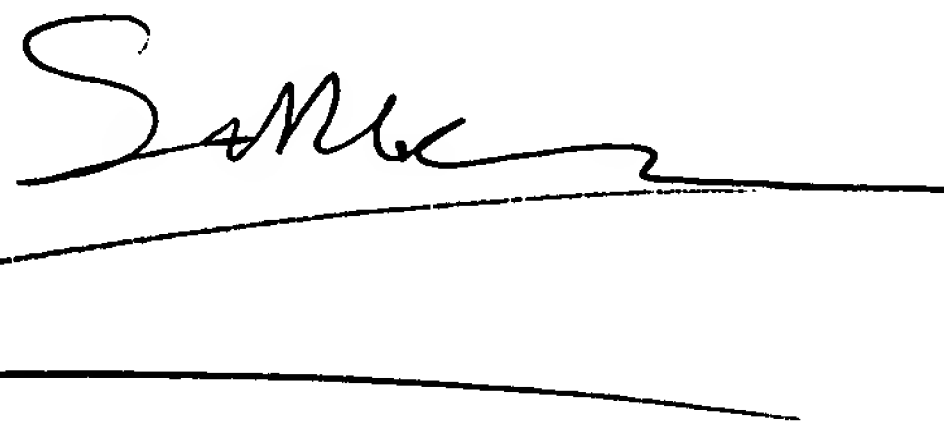
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470.

The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sameh H. Tawfik
Patent Examiner
Art Unit 3721

A handwritten signature in black ink, appearing to read 'Sameh', followed by a long, sweeping horizontal line that extends to the right.

ST.